

Statin Use and Risk of Developing Diabetes

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Abstract

Statin, 3-hydroxy-methylglutaryl coenzyme A reductase inhibitors are widely used in the primary and secondary prevention of cardiovascular diseases to lower serum cholesterol levels.

In recent years, several randomized, controlled trials (RCTs) and observational studies have reported increased risk for onset type 2 diabetes mellitus with statin treatment, particularly with use of high-intensity statins that reduce low-density lipoprotein cholesterol (LDL-C)

Objective: *To investigate the relationship between statin therapy and the risk of developing type 2 diabetes.*

Research design and methods: *Articles were identified through a database search and by consulting reference lists of review articles that were located. Relevant data were coded by previous studies. After which, the researcher summarized the data from randomized, controlled trials and observational studies for statin-associated Type 2 diabetes risks versus the use of statin therapy established benefits for CV risk reduction.*

Results: *During the follow up, the increase in incidence of Type 2 Diabetes in those with major risk is approximately 25% for statin use, compared to placebo. However, in those with major T2D risk factors, the number of CV disease events prevented for each excess case of T2D is close to or greater than one, indicating that the risk-benefit ratio still strongly favors use of statin therapy.*

Conclusion: *It was observed that there are significantly higher rates of diabetes with statin therapy. Therefore, the effect of statins increases diabetes risk appears to extend to populations at high risk for diabetes.*

Keywords: *3-hydroxy-methylglutaryl coenzyme; statin therapy; Serum cholesterol levels.*